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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/075,208	02/14/2002	Shinya Adachi	34409	7063

116 7590 01/16/2003

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EXAMINER	
TO, TUAN C	
ART UNIT	PAPER NUMBER
3663	

DATE MAILED: 01/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/075,208	ADACHI ET AL.	
	Examiner	Art Unit	
	Tuan C To	3663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 February 2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *06 May 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *4* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hubschneider et al. (US 2002/0091486A1) and in view of Hayashi et al. (US 6035253A).

Claim 1:Hubschneider et al. disclose a motor vehicle navigation system that receives route information from a central unit, where said central unit is characterized in that the traffic information, instantaneous location and destination are transmitted from the control unit to the vehicle unit (See page 1, paragraph 0008). And said vehicle unit is a navigation device for navigating the vehicle from a current location to a specified destination (See Figure 1, 7). However, Hubschneider et al. do not disclose road shape data including said on-road location information consisting of a string of coordinates representing the road shape. The U.S Patent No. '253A to Hayashi et al. is the secondary reference, disclosing the missing features from Hubschneider et al. For example in the abstract, Hayashi et al. teach "a structure-profiled map on which a structure representing shape and a road are drawn is displayed so as to provide road guidance, wherein a route is displayed on the structure-profiled map along a road which is displayed for guidance". In addition, in Hayashi et al.'s, figure 14(A) and figure 14(B) show that the road shape data including on-road location consisting of coordinates. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system and method of Hubschneider et al. to include the teachings of Hayashi et al. in order to guide the vehicle on alternative route whenever the current route is in a condition for construction or there is an accident happens on that route.

Claim 2: Hayashi et al. also disclose the method of using a string of coordinates arranging latitude/longitude data of the road point per predetermined distance interval as a string of coordinates representing road shape (See Figure 5(A) and Figure 5(B).

Claim 3: As represented in the invention of Hayashi et al. the shape of the road are drawn from at least two specific points (See column 3, lines 44-64; Figure 14(B)).

Claims 4-7, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hubschneider et al. (US 2002/0091486A1) and in view of Hayashi et al. (US 6035253A) and Lee (US 6233518B1).

Claims 4, 7, and 9: As discussed above, the combination of Hubschneider et al. and Hayashi et al. are combined to teach the limitation of claim 1. However, neither Hubschneider et al nor Hayashi et al. mention about a location information converter for converting transmit on-road location information to road shape data. That feature is disclosed in the invention of Lee. First, Lee discloses a method and system for providing an image vector-based traffic information. Second Lee discloses a traffic information converter as shown in Figure 1A of the invention. In addition, traffic information transmitter 130 is playing a role in transmitting the traffic information to a user device installed in the vehicle. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the system and method of Hubschneider et al. to include the teachings of Hayashi et al. and Lee so that any

traffic data or vehicle position data collected by sensors or devices which are fixed on a road-side would be converted from an analog data to digital data.

Claim 5: Hayashi et al. also disclose the method of using a string of coordinates arranging latitude/longitude data of the road point per predetermined distance interval as a string of coordinates representing road shape (See Figure 5(A) and Figure 5(B).

Claim 6: As represented in the invention of Hayashi et al. the shape of the road are drawn from at least two specific points (See column 3, lines 44-64; Figure 14(B)).

Claims 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hubschneider et al. (US 2002/0091486A1), Hayashi et al. (US 6035253A), Lee (US 6233518B1), and further in view of Kwak et al. (US 2002/0040270).

Hubschneider et al., Hayashi et al., and Lee are combined to produce the claimed invention, however, none of those mention about said party receiving the on-road location information is a center for collecting traffic information in other areas. Kwak et al. teach a method and apparatus for vehicle navigation service using DSRC system, wherein a traffic information service unit 100 is connected to a road side unit for generating traffic information (See page 2, paragraph 0020). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the system and method of Hubschneider et al., Hayashi et al, Lee, and Kwak et al. to meet the terms of the claims. It should be recognized that the teachings of Kwak provide the advantage of the system and method of Hubschneider et al., Hayashi et al, and

Lee by gathering traffic information on the road data and transferring data to vehicle navigation device. It is notified that examiner's position that an operator of the vehicle is able to select an optimum route in according to the traffic information has been updated from each road-side equipment.

Conclusion

The prior art made of record, which are listed in PTO-892, and not relied upon are considered pertinent to applicant's disclosure includes the following: Okada's, Mintz's, Ohta (US 2201/0047242), Ohta (US 6348490), Kawasaki (US 6335695), and Matshushita Denki's.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan C To whose telephone number is (703) 308-6273. The examiner can normally be reached on from 8:00AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on (703) 305-8233. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7687 for regular communications and none for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

/tc

January 6, 2003

THOMAS G. BLACK
SUPERVISORY PATENT EXAMINER
GROUP 3600